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ABSTRACT

Reviewed is the practice of using children to teach other children; and described is an organized approach, Peer Assisted Learning, designed to assist the regular class placement of mildly handicapped students through peer involvement. Outlined are such steps as recruiting participants, delineating responsibilities, tutor training, implementation of the program, and evaluation. It is noted that this program can benefit gifted as well as handicapped students. (IM)

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Mainstreaming Through Peer Assisted Learning

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MAINSTREAMING THROUGH PEER ASSISTED LEARNING

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Recent state and federal mandates have guaranteed the rights of the handicapped to complete and appropriate public education. For the majority of exceptional children, the mildly handicapped, proper placement will be in the regular classroom or the mainstream of education. Unfortunately, funds are not always available to employ the number of specialists necessary to provide adequate supportive services. In many areas, resource programs are overcrowded and consultant services are overextended. Little assistance is often provided for the regular classroom teacher asked to program for an ever broader range of individual differences. If mainstreaming is to succeed in spite of current fiscal realities, then educators must seek innovative, cost-effective methods of delivering services to exceptional learners. One promising alternative is the use of student tutoring to supplement classroom instruction.

The practice of using children to teach other children is hardly new. Its historical roots in America extend back to the days of the one-room schoolhouse. Interest in peer tutoring was revived in the mid-sixties as educators became concerned with providing individualized and compensatory instruction. In the past decade, the number of student tutoring projects has increased dramatically. Programs have been characterized by great diversity in goals, participants, and mode of operation. Peer tutoring has been attempted in inner city (Carns, 1972; Olson, 1969; Rollins, 1970;

Snapp, 1972) and rural settings (Morgan & Toy, 1970). Programs have been implemented in single classrooms (Starlin, 1971), resource rooms (Jenkins, et al, 1974; Mayhall, et al, 1975), elementary schools (Hagen & Moeller, 1971; Robertson, 1971), districts (Boise, 1975; Carroll, 1973; Muller, 1974; Wolpert & Schroeder, 1975), and in communities after school (Edler, 1967). All ages have participated in student tutoring, from four-year olds (Feshbach & Devor, 1969) to college students (Bradfield, Gray & Foster, 1973; Klosterman, 1970; Zack, Horner & Kaufman, 1969). Although the majority of programs have been aimed at improving reading skills (Bean & Luke, 1972; Erickson & Cromack, 1972), peer tutoring has been attempted in all basic subject matter areas (Morgan & Toy, 1970; Stainback & Stainback, 1972). Many of the reports in the literature are anecdotal in nature; however, a wealth of experimental evidence does exist to support the contention that both cognitive and affective gains can be achieved by children receiving tutoring from other students (Bloom, 1976; Devin-Sheehan, Feldman & Allen, 1976; Gartner, Kohler & Riessman, 1972; Stainback, Stainback & Lichtward, 1975).

Student Tutoring for Exceptional Children

A major problem with research has involved the supplemental nature of peer tutoring, the fact that it is provided in addition to the regular classroom program. In experimental studies, tutored students have been compared with non-tutored subjects, resulting in a failure to control for total instructional time. One of the few studies attempting to deal with this problem warrants particular attention. Jenkins and his associates (Jenkins, et al, 1974) found that ten learning disabled and three mentally retarded children achieved significantly greater proficiency in sight work recognition when tutored individually by another student than when taught in a small group by the resource teacher for

the same amount of time. Similar results were found with different subjects using spelling, oral reading, and multiplication tasks. Tutorial instruction was also compared with self-study of multiplication facts. Greater improvement was noted when 3rd graders were tutored by 6th graders than when they studied independently. In addition, skills of the tutor's themselves improved as a result of teaching math facts to younger children. The authors suggest that findings have implications for resource teaching. If one-to-one tutoring can be superior to small group instruction for certain academic skills, then perhaps the role of the resource teacher can be expanded to include instructional management of student tutoring pairs.

Exceptional Children as Tutors

While most studies have focused on the handicapped as the recipients of tutoring, evidence does exist to suggest that exceptional students can be effective tutors as well. Conrad (1976) found that achievement level of second grade tutors had no significant effect on reading gains made by first-grade tutees. Children taught by low-achieving second grade tutors learned as many sight words as children tutored by high-achieving second graders. More severely handicapped youngsters, such as the trainable mentally retarded, have also been shown to make effective reading tutors. Brown, Fenrich and Klemme (1971) reported that retarded adolescents produced significant improvement in eating and dressing skills of younger retarded tutees in a residential school. It appears then, that with adequate preparation, exceptional learners can provide effective tutorial assistance.

Even more impressive is the discovery that tutors themselves benefit in many ways from the experience. In Wagner's (1974) study, tutors exhibited increased proficiency in eating skills, as well as significant decrease in the

frequency of maladaptive behaviors observed. Lane, Pollack, and Sher (1972) noted similar improvement in the behavior of disruptive junior high school students who tutored third- and fourth-grade out-patients at a Community Mental Health Center. In another study (Balmer, 1972), parents and teachers reported that elementary students with learning and behavior problems had developed greater sense of responsibility and self-worth as a result of tutoring younger children in special education. Although affective gains are difficult to measure empirically, positive attitudes toward self and school and none-the-less important outcomes of peer tutoring. It is likely that self-concept is enhanced by the realization that one has something to offer and has been entrusted with the responsibility of teaching someone else. For exceptional children, the chance to be giving rather than receiving help may be a truly unique experience.

Academic benefits also accrue to those who tutor others. While teaching, the tutor is at least reviewing the material. More often, he may be reformulating his knowledge through the processes of analysis, synthesis, and application. Whether through working with a concept for a longer time, or by experiencing it at higher cognitive levels, the tutor learns as he teaches. Several studies have reported impressive tutor gains of low-achieving children given the chance to tutor (Bean & Luke, 1972; Harris, 1971). Hassinger and Via (1969) found that poorly attending high school students performing several years below grade level made progress in reading that even surpassed the gains made by their elementary tutees. Allen and Feldman (1974) attempted to show that it is actual tutoring and not merely the extra time spent studying that results in improved academic performance. Fifth-grade low-achievers who tutored third graders for two weeks scored significantly better on the reading task than did comparable students who had spent an equal amount of time studying alone.

It appears, then that peer tutoring affords both tutor and tutee an opportunity to develop cognitively and affectively. Of course, the benefits to be realized depend on the quality of the specific program. While there is no set formula for effective peer tutoring, it is essential that planning and implementation are approached systematically. Procedures must be established to insure open communication among all participants. For a program to be of practical value, it cannot make unrealistic demands on teacher-time. Finally, a program should provide sufficient structure for the tutor to feel comfortable in teaching while maximizing learning opportunities for the tutee. The remainder of this paper will describe one program, Peer Assisted Learning, designed to fulfill the above specifications.

PEER ASSISTED LEARNING

Peer Assisted Learning is an organized approach for facilitating the process of children helping other children. It attempts to offer both students a positive growth experience in the context of a very special one-to-one relationship. Peer Assisted Learning is flexible in design, and programs can vary greatly in emphasis and size depending on the desired goals. Tutoring may focus on cognitive or affective gains or a combination of both. It can be implemented by a single teacher within her own classroom or, on a larger scale, by an entire school or district. Specific operating procedures should be tailored to the needs of each program, but in all instances, the following steps should be included: 1) recruiting participants; 2) delineating responsibilities; 3) training tutors; 4) making arrangements; 5) implementing Peer Assisted Learning; 6) monitoring and evaluating.

Recruiting Participants

The primary qualification for anyone to participate in Peer Assisted Learning is simply desire to be involved. Only teachers who sincerely want to use peer tutoring should be included, since forcing teachers to participate is not conducive to success. It is more advantageous to begin with a few interested teachers than many apathetic ones.

Any child who wants help in learning should be eligible to receive tutoring. Likewise, any student who would like to tutor can contribute to the program. It is usually advisable to include a cross-sect' . of students from the school population. Children with learning and behavior problems may be as successful as popular and gifted students. Youngsters with learning difficulty are given the opportunity to gain extra reinforcement for already learned skills, while students with behavior disorders are allowed to assume a position of responsibility. Popular children afford status to the program, and gifted students can direct their talents creatively. Students may be referred or recommended by their teachers, or prospective tutors may apply for the position on their own.

Delineating Responsibilities

It is essential that all participants understand their responsibilities before the program is underway. The principal's major role is to provide support to those teachers involved in Peer Assisted Learning. It is helpful to designate one individual as coordinator whenever more than two teachers are attempting peer tutoring. Resource teachers, learning disabilities specialists, social workers, reading consultants, etc. make ideal coordinators since they already work on a school-wide basis and usually have more flexible scheduling. The coordinator's responsibilities include such tasks as involving the staff,

processing referrals, matching student pairs, making arrangements, training tutors, and monitoring the program. The tutor's classroom teacher is mainly responsible for supporting his efforts. The teacher of the younger child has a more encompassing role. In addition to referring those who need help, the teacher is to specify goals and objectives and to plan tutorial activities. The tutor must also know all that is expected of him in Peer Assisted Learning. He is responsible for his own behavior, including completing all assigned classwork and following through on all tutorial commitments.

Tutor Training

Adequate training of tutors is a critical aspect of Peer Assisted Learning. Training can be done through individual conferences with the teacher of the youngster or the coordinator. When several tutors need training at once, however, it becomes more expedient to use a group approach through a series of workshops. The coordinator uses techniques such as discussion, brainstorming, and role playing in an attempt to avoid a traditional classroom atmosphere while promoting the development of new teaching skills. During these workshop sessions, the coordinator helps the students to acquire the following interactive and instructional competencies:

1. Through the use of verbal encouragement and appropriate touch, facial expressions, and gestures, the tutor leads the child to attempt the task presented.
2. Through the use of praise, touch, gesture, and facial expression, the tutor appropriately reinforces desired responses from the child.
3. Given an error response from the learner, the tutor corrects the mistake without criticizing and verbally encourages the child to attempt the task again.

4. Following instruction by the teacher/coordinator, the tutor demonstrates specific teaching techniques required for his tutorial assignment.
5. Following instruction by the teacher/coordinator, the tutor accurately records data on the learner's performance.
6. After an explanation of basic policies, the tutor demonstrates his acceptance of tutoring responsibilities by a verbal or written agreement.

Once these objectives have been achieved in preservice training, additional follow-up sessions may be arranged as needed to refine skills, solve problems, and provide continuous support.

Making Arrangements

Practical details concerning when and where tutoring will take place should be resolved before tutors complete their training. Although scheduling can be a problem, arrangements are made more easily if teachers have been asked to indicate several possible time periods on their initial referral forms. Twenty- to thirty-minute sessions, three to five days per week are typically most effective. Tutoring can be conducted in a variety of settings--the tutee's classroom, the resource room, the library, or even hallways throughout the school. Such decisions may be made by the principal or coordinator, or may reflect individual preferences of teachers involved.

Implementing Peer Assisted Learning

Tutoring actually represents a joint venture between the student tutor and the tutee's classroom teacher. In most instances, the teacher plans the instructional program and the tutor implements it. Often times, the tutor is asked to record data during the actual tutoring session and to bring the information to weekly conferences with the classroom teacher. As the tutor gains

competence in carrying out the teacher's suggestions, he may be given more freedom to plan his own lesson activities. The teacher and tutor discuss the child's progress regularly in an attempt to coordinate classroom and tutorial instruction.

Monitoring and Evaluating Peer Assisted Learning

Each program should include provisions for assessing its own effectiveness. Procedures should be developed for monitoring the process of tutoring as well as measuring the end-products, the gains for tutors and tutees. Tutoring sessions should be periodically observed by the coordinator and classroom teacher. In addition, tutors should be taught to use some means such as Precision Teaching for systematically measuring progress toward individual objectives. In some situations, a formal evaluation based on standardized pre- and post-testing will be desired.

Conclusion

Once Peer Assisted Learning is initiated within a particular school, it multiplies the amount of direct instructional time available. As an extension of the regular classroom program, peer tutoring provides valuable one-to-one attention that the teacher is not always able to give. For students participating in a resource program, Peer Assisted Learning may supply the necessary involvement to help them experience success and acceptance in the regular classroom. Tutoring may also provide a means of serving children who are on waiting lists for special programs. On the other hand, phasing children out of special services is often a problem in itself. Peer Assisted Learning is one means of giving a student support, while reducing the amount of professional intervention and encouraging him to function more independently in the mainstream. Peer Assisted Learning is also a model that can serve the gifted as well as the

handicapped. Although service to children is the primary concern in educational programming, administrative aspects of student tutoring make it even more appealing. No additional professional staff and no expensive instructional materials are required. Tutoring simply mobilizes a resource already in abundant supply in the schools - students. The program can be operative as soon as educators are willing to initiate it. Weighing organizational time involved against advantages to be gained by both tutor and tutee, peer tutoring has the potential to be truly an educational bargain.

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